PHY 842 FALL SEMESTER 2018

SYLLABUS

TITLE: Classical Electrodynamics II

INSTRUCTOR: Prof. Daniel Stump, Room 3222 B.P.S. building

TEXTBOOKs:
Wilcox and Thron, Macroscopic Electrodynamics (required)
Jackson, Classical Electrodynamics (recommended)

HOMEWORK:
readings and problems; approximately 10 hours per week

COURSE DESCRIPTION:
The course description on the Registrar's website is wrong.
See the Graduate Handbook (page 28) for the correct description:

CLASSICAL ELECTRODYNAMICS II (PHY842)
Electrostatics of conductors, Electrostatics of dielectrics, Microscopic models of dielectric media, Magnetostatics, Para-, dia-, and ferromagnetism, Quasistationary fields, skin effect, Electromagnetic waves in material media, propagation, reflection, refraction and polarization. Waveguides and resonant cavities. Scattering and diffraction. Electrodynamics of special media (plasma, superconductors). Energy loss by charged particles, Cherenkov radiation.

Based on the subjects that were included in PHY 841 Spring Semester 2018,
we will subtract "waveguides and resonant cavities"
and we will add "theory of radiation".

HAND IN THE STUDENT SURVEY ; DUE FRIDAY AUGUST 31